

WHAT IS CLAIMED IS:

1. A method of wiring a semiconductor integrated circuit, said semiconductor integrated circuit having a first layer and a second layer, the method comprising the steps of:

5 disposing a first wiring on said first layer and disposing a second wiring on said second layer, wherein said first and second wirings are disposed subject to a condition that a predetermined number of through-holes are set between said first and second wirings, and said first and second 10 layers being electrically connected to each other;

searching for a setting area in one of said first and second layers, and an corresponding area in the other of said first and second layers as a projection area of the setting area, that enable a setting of new other through-hole 15 between said first and second wiring that have been determined; and

setting the new other through-hole between said setting area and said corresponding area.

20 2. The method of wiring a semiconductor integrated circuit according to claim 1, wherein

at the through-hole setting step, the shape of said new other through-hole is the same as the shape of said through-hole that has been set at the wiring step.

3. The method of wiring a semiconductor integrated circuit according to claim 1, wherein

at the through-hole setting step, the shape of said new other through-hole is decided based on a shape of said

5 setting area.

4. A method of wiring a semiconductor integrated circuit, said semiconductor integrated circuit having a first layer and a second layer, the method comprising:

10 a first wiring step of disposing a first wiring on said first layer and disposing a second wiring on said second layer, wherein said first and second wirings are disposed subject to a condition that a predetermined number of through-holes are set between said first and second wirings,

15 and said first and second layers being electrically connected to each other;

an area searching step of searching for a setting area in said first layer, and an corresponding area in said second layer as a projection area of the setting area, that enable

20 a setting of new other through-hole between said first and second wiring that have been determined;

a second wiring step of disposing an additional wiring for setting the other through-hole in either said searched setting area or said searched corresponding area; and

25 a through-hole setting step of setting the new other

through-hole between said setting area and said corresponding area.

5. The method of wiring a semiconductor integrated
5 circuit according to claim 4, wherein

at the area searching step, the search is made under
a condition that said setting area that is searched for is
a part of the area in which said first wiring has been disposed,
and that said corresponding area that is searched for is
10 an area that is close to said second wiring and the area
in which no wiring or circuit element exists, and

at the second wiring step, said second wiring is
extended to said corresponding area.

15 6. The method of wiring a semiconductor integrated
circuit according to claim 4, wherein

at the area searching step, the search is made under
a condition that said setting area that is searched for is
an area that is close to said first wiring on said first
20 layer, and the area in which no wiring or circuit element
exists, and that said corresponding area that is searched
for is an area that is close to said second wiring on said
second layer, and the area in which no wiring or circuit
element exists, and

25 at the second wiring step, said first wiring on said

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first layer is extended to said setting area, and said second wiring on said second layer is extended to said corresponding area.

5 7. The method of wiring a semiconductor integrated circuit according to claim 4, wherein

at the through-hole setting step, the shape of said new other through-hole is the same as the shape of said through-hole that has been set at the first wiring step.

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8. The method of wiring a semiconductor integrated circuit according to claim 4, wherein

at the through-hole setting step, the shape of said new other through-hole is decided based on a shape of said setting area.

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9. A semiconductor integrated circuit comprising:

a multi-layer structure including a first layer and a second layer;

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a setting area disposed on said first layer;

a corresponding layer disposed on said second layer as a projection area of said setting area; and

a through-hole which connects between said setting area and said corresponding area, said through-hole having a shape corresponding to the shapes of said setting area

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and said corresponding area.

10. A computer program containing instructions which when
executed on a computer causes the computer to realize a method
5 of wiring a semiconductor integrated circuit, said
semiconductor integrated circuit having a first layer and
a second layer, the method comprising the steps of:

disposing a first wiring on said first layer and
disposing a second wiring on said second layer, wherein said
10 first and second wirings are disposed subject to a condition
that a predetermined number of through-holes are set between
said first and second wirings, and said first and second
layers being electrically connected to each other;

searching for a setting area in one of said first and
15 second layers, and an corresponding area in the other of
said first and second layers as a projection area of the
setting area, that enable a setting of new other through-hole
between said first and second wiring that have been
determined; and

20 setting the new other through-hole between said
setting area and said corresponding area.

11. A computer program containing instructions which when
executed on a computer causes the computer to realize a method
25 of wiring a semiconductor integrated circuit, said

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semiconductor integrated circuit having a first layer and a second layer, the method comprising the steps of:

- a first wiring step of disposing a first wiring on said first layer and disposing a second wiring on said second 5 layer, wherein said first and second wirings are disposed subject to a condition that a predetermined number of through-holes are set between said first and second wirings, and said first and second layers being electrically connected to each other;
- 10 an area searching step of searching for a setting area in said first layer, and an corresponding area in said second layer as a projection area of the setting area, that enable a setting of new other through-hole between said first and second wiring that have been determined;
- 15 a second wiring step of disposing an additional wiring for setting the other through-hole in either said searched setting area or said searched corresponding area; and
a through-hole setting step of setting the new other through-hole between said setting area and said 20 corresponding area.